ATTACHMENT A
Remarks

Claims 1, 2, 4-6 and 8-21 are pending in the present application. By this Amendment, Applicants have amended claims 1, 2, 4-6 and 8-10, and canceled claim 22. Applicants respectfully submit that the present application is in condition for allowance based on the discussion which follows.

As an initial point, Applicants greatly appreciate the Examiner extending a telephonic interview with their representative, Mr. Stephen Weyer, on August 4, 2008. In accordance with that interview, Applicants have amended claim 1 to more clearly define the invention and to further clarify novelty and non-obviousness of the claimed invention over the prior art. Applicants respectfully submit that the pending claims, as amended, are allowable and distinguishable over the prior art, as agreed by the Examiner during the telephone interview, and as further discussed below with regard to addressing the rejections in the outstanding Office Action.

Claims 1-2, 4-10 and 22 were rejected under 35 U.S.C. 112, first and second paragraphs, as failing to comply with the written description requirement. By this Amendment, Applicants have amended claim 1, thereby rendering the rejection to the claims now moot.

Claims 1-2, 4-10 and 22 were rejected under 35 U.S.C. 103(a) as being unpatentable over EP '300, Rigby et al., and Aurenius. Applicants respectfully submit that the presently claimed invention is not obvious in view of the cited prior art.

As amended, claim 1 more clearly recites a device for a biochemical assay which comprises a support in which all external dimensions of the support are less than 100 µm. The support further includes a spatially varying pattern form thereon for

identification purposes. The support has an anodised metal surface layer. Probe molecules are bound to the anodised metal surface layer of the support which is used for a biochemical assay.

Novel features of the present device which distinguish over the prior art include a support having the recited less than 100 μm in all external dimensions under the support, probe molecules for the biochemical assay bound to the anodised layer of the support, and a spatially varying pattern formed on the support for identification purposes. The combination of the aforementioned features provides for a novel device which is in no way anticipated by, or obvious in view of, the prior art.

Aurenius

Turning to the prior art in detail, Aurenius is directed to a microlabeling system and method of making thin labels used for labeling electronics. However, the Aurenius label is not suitable for aqueous suspensions. Aurenius fails to teach or in any way make obvious the adherence of probe molecules to its label. Accordingly, since the device of Aurenius is not suitable for aqueous suspensions and Aurenius not surprisingly is silent with regard to adhering probe molecules for a biochemical assay, one of ordinary skill in the art would not modify Aurenius to arrive at the claimed device which comprises a support with probe molecules. Further, one of ordinary skill in the art would not be led to combine its labeling technique with other biochemical assays in that the Aurenius disclosure is limited to labeling which is not suitable for biochemical assays. Accordingly, one of ordinary skill in the art would not combine the Aurenius disclosure with art pertaining to biochemical assays.

Rigby et al.

Rigby et al. is directed to inorganic microfiltration membranes. In order to function as a filter, the Rigby device discloses specific sizes of its membranes. First, those dimensions are all substantially larger than the recited less than 100 μm dimension of all external dimensions of the claimed support. One of ordinary skill in the art would not modify the dimensions of the microfiltration membrane of Rigby, as doing so would thwart the purpose of its disclosure, which is to produce a microfiltration membrane. If one were to reduce the size of the microfiltration membrane to have the dimensions of the claimed support, the microfiltration membrane would cease to have the required properties to function as a filter. Furthermore, Rigby fails to teach or in any way make obvious a spatially varying pattern for identification purposes attached to its filter, as claimed.

EP '300

EP '300 is directed to a thin film diagnostic device comprising an anodised color-generating metal in which the device can be used to test for biological or synthetic products in a sample. EP '300 fails to teach or in any way make obvious applying a spatially varying pattern on its device. Further, the device is in the form of a film material and not as a support having all external dimensions less than 100 μm, as claimed.

The present invention is not obvious in view of the prior art.

Applicants respectfully submit that the present invention is not obvious from the cited prior art, individually or in combination with one another. In order for an invention to be obvious under 35 U.S.C. § 103(a), there must be a reasonably apparent reason

why one of ordinary skill in the art would have either modified the individual prior art or combined the prior art in such a way as to arrive at the claimed invention. With regard to individual references, there must be a reasonably apparent reason why one of ordinary skill in the art would have modified the individual prior art reference in order for one skilled in the art to arrive at the claimed invention. Similarly, with regard to combining two or more references in an obviousness-type rejection, there must be a reasonably apparent reason why one of ordinary skill in the art would have selected various elements in individual prior art references and combined them in such a way as to lead one of ordinary skill in the art to arrive at the claimed invention (see e.g. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ____ (2007). Such a reason may be a known problem in the art which would lead one of ordinary skill in the art to modify the prior art, individually, or to combine elements known in the prior art to arrive at the claimed invention. Furthermore, in order for it to be obvious to one of ordinary skill in the art, one of ordinary skill in the art must have realized that there would be a benefit from either modifying individual prior art disclosures or combining various elements from the prior art and assembling them together.

The present invention is not obvious from the individual or combined teachings, as there fails to be any reasonably apparent reason why one would have modified the prior art or combined the individual prior art references to arrive at the claimed invention. One of ordinary skill in the art would not have recognized any problem in the art and, therefore, would not have been led to modify and/or combine individual elements of various different prior art references to arrive at the claimed invention. Specifically, there is no apparent reason why one skilled in the art would have combined

Aurenius, EP '300 and Rigby together to arrive at the claimed invention, as there fails to be any problem known to one of ordinary skill in the art which would lead one to combine their individual teachings. The Examiner has failed to provide any problem in the art which would lead one to combine the three references to arrive at the claimed support. Further, there fails to be any known benefit to one of ordinary skill in the art from making such a combination, as claimed. Thus, the lack of a known problem in the art, and a lack of realizing any benefit from combining the references as claimed, results in one of ordinary skill in the art not finding the present invention obvious in view of the prior art cited.

For example, one of ordinary skill in the art, familiar with EP '300, would not have seen any benefit from labeling its thin film, such as using a spatially varying pattern label disclosed by Aurenius. Doing so would not have provided any known benefit to one of ordinary skill in the art since the EP '300 film is applied to a glass support of a substantial size. Therefore, there fails to be any reason why one of ordinary skill in the art would apply the label of Aurenius to the EP '300 film.

Furthermore, there fails to be any reasonably apparent reason why one would modify the EP '300 thin film device, which must be in the form of a thin film in order to be used for its biochemical assay, in accordance with its disclosure (see, e.g., EP '300, Examples 1-8) to form a support having the claimed all external dimensions less than 100 μm. Therefore, one of ordinary skill in the art would not modify the EP '300's thin film to form a support having the claimed dimensions, as doing so would thwart its clear disclosure, which is to form a film on a glass support which then can be analyzed using its disclosed detectors.

Moreover, even if one were led to modify the EP '300 film to form a support having the claimed dimensions, there fails to be any enabling disclosure to allow one skilled in the art to practice the EP '300 invention for use in a biological assay, in accordance with its disclosure. The EP '300 disclosure teaches exclusively using a glass support of a substantial size in its assay and is completely silent with regard to using a support of the size claimed. Therefore, based on EP '300, one could not practice the invention as claimed. Further, as discussed above, one of ordinary skill in the art would not be led to modify the EP '300 device to arrive at the claimed invention, as doing so would thwart the ability for one of ordinary skill in the art to be able to use its device as a diagnostic tool, thereby thwarting the purpose of forming its thin film. Accordingly, EP '300 fails to provide an enabling disclosure for one of ordinary skill in the art to modify its device to arrive at the claimed invention (i.e. apply probe molecules to a support, as claimed).

Similarly with regard to Rigby, there fails to be any reasonably apparent reason why one of ordinary skill in the art would modify its inorganic microfiltration membrane to have the claimed dimensions and/or to have a spatially varying pattern (e.g., one like Aurenius), as claimed. There fails to be any reasonably apparent reason why one of ordinary skill in the art would apply a spatially varying pattern of Aurenius to the microfiltration membrane of Rigby. There fails to be any reasonably apparent benefit from applying a spatially varying pattern to the microfiltration membrane of Rigby. And, moreover, as discussed above, modifying the dimensions of the microfiltration membrane of Rigby to those of the claimed invention would thwart its purpose, which is to function as a microfiltration, since having all external dimensions of less than 100 μm

would thwart the ability of the Rigby device to function as a microfiltration membrane, as disclosed.

Finally with regard to Aurenius in view of EP '300 and Rigby, as discussed above, there fails to be any reasonably apparent reason why one of ordinary skill in the art would modify the Aurenius labeling system of making thin labels for electronics and form a label applied to a support with all external dimensions less than 100 μm, and including probe molecules, as the Aurenius device would not be applicable for use in a biological assay environment. Further, there fails to be any disclosure which would lead one of ordinary skill in the art to modify the Aurenius disclosure so that it could be used with probe molecules. Furthermore, there fails to be any reasonably apparent reason which would lead one of ordinary skill in the art to modify the dimensions of the Aurenius label. Moreover, modifying its label to have all external dimensions less than 100 μm would result in the label being so small that it would cease to function as a label which can be read. Contrary to the Examiner's assertion, the Examiner has failed to provide any evidence that one of ordinary skill in the art could reduce the size of the Aurenius label and still have the label function in accordance with its disclosure, i.e. being able to read its label.

Finally, with regard to various other prior art references which disclose probes for biochemical assays attached to a wall of a vessel used during the biochemical assay, in the present invention, the probe is attached to a solid support which further contains a spatially varying pattern for identification and the recited dimensions. Accordingly, one of ordinary skill in the art would not be led to combine prior art disclosing an identification pattern on a support and apply probe molecules for a biochemical assay to

that support, as there fails to be any reasonably apparent reason which would lead one of ordinary skill in the art to make such a combination. There fails to be any teaching anywhere in the art of a labeled support having the claimed dimensions which further contains probe molecules. Accordingly, Applicants respectfully submit that the present invention is novel and non-obvious in view of the prior art.

In view of the foregoing, Applicants respectfully submit that the present application is in condition for allowance.

END OF REMARKS